

Backward Design: Stage 1

Stage 1: Desired Results

- G** Established Goals
- U** Enduring Understandings
- Q** Essential Questions
- K S** Knowledge and Skill

Stage 2: Evidence

Stage 3: Learning Plan

In Stage 1 we consider the desired results of the design according to the following four categories:

1. **Established Goals** – These typically include National, State, Local or Professional Standards; Course or Program Objectives, District Learner Outcomes, etc.
2. **Enduring Understandings** – Stated as full-sentence statements, the Understandings specify what we want students to come to understand about the “big ideas.”
3. **Essential Questions** – These open-ended, provocative questions are designed to guide student inquiry and focus instruction for “uncovering” the important ideas of the content.
4. **Knowledge (K) and Skills (S)** – These are the more discrete objectives that we want students to know and be able to do.

DESIGN STANDARDS for STAGE 1 – *To what extent does the design:*

1. focus on the “big ideas” of targeted content?

Consider: Are...

- ☐ the targeted understandings enduring, based on transferable, big ideas at the heart of the discipline and in need of “uncoverage”?
- ☐ the targeted understandings framed as specific generalizations?
- ☐ the “big ideas” framed by questions that spark meaningful connections, provoke genuine inquiry and deep thought, and encourage transfer?
- ☐ appropriate goals (e.g., content standards, benchmarks, curriculum objectives) identified?
- ☐ valid and unit-relevant knowledge and skills identified?

Stage 1: Identify Desired Results.

Established Goals:

G

- Standard 6 - Students will understand essential concepts about nutrition and diet.
- 6, a -Students will use an understanding of nutrition to plan appropriate diets for themselves and others.
 - 6, c -Students will understand one's own eating patterns and ways in which these patterns may be improved.

What enduring understandings are desired?

Students will understand that:

U

- A balanced diet contributes to physical and mental health.
- The USDA Food Pyramid presents relative guidelines for nutrition.
- Dietary requirements vary for individuals based on age, activity level, weight, and overall health.
- Healthful living requires an individual to act on available information about good nutrition even if it means breaking comfortable habits.

What essential questions will be considered?

Q

- What is healthful eating?
- Are you a healthful eater? How would you know?
- How could a healthy diet for one person be unhealthy for another?
- Why are there so many health problems in America caused by poor eating despite all of the available information?

What key knowledge and skills will students acquire as a result of this unit?

Students will know:

K

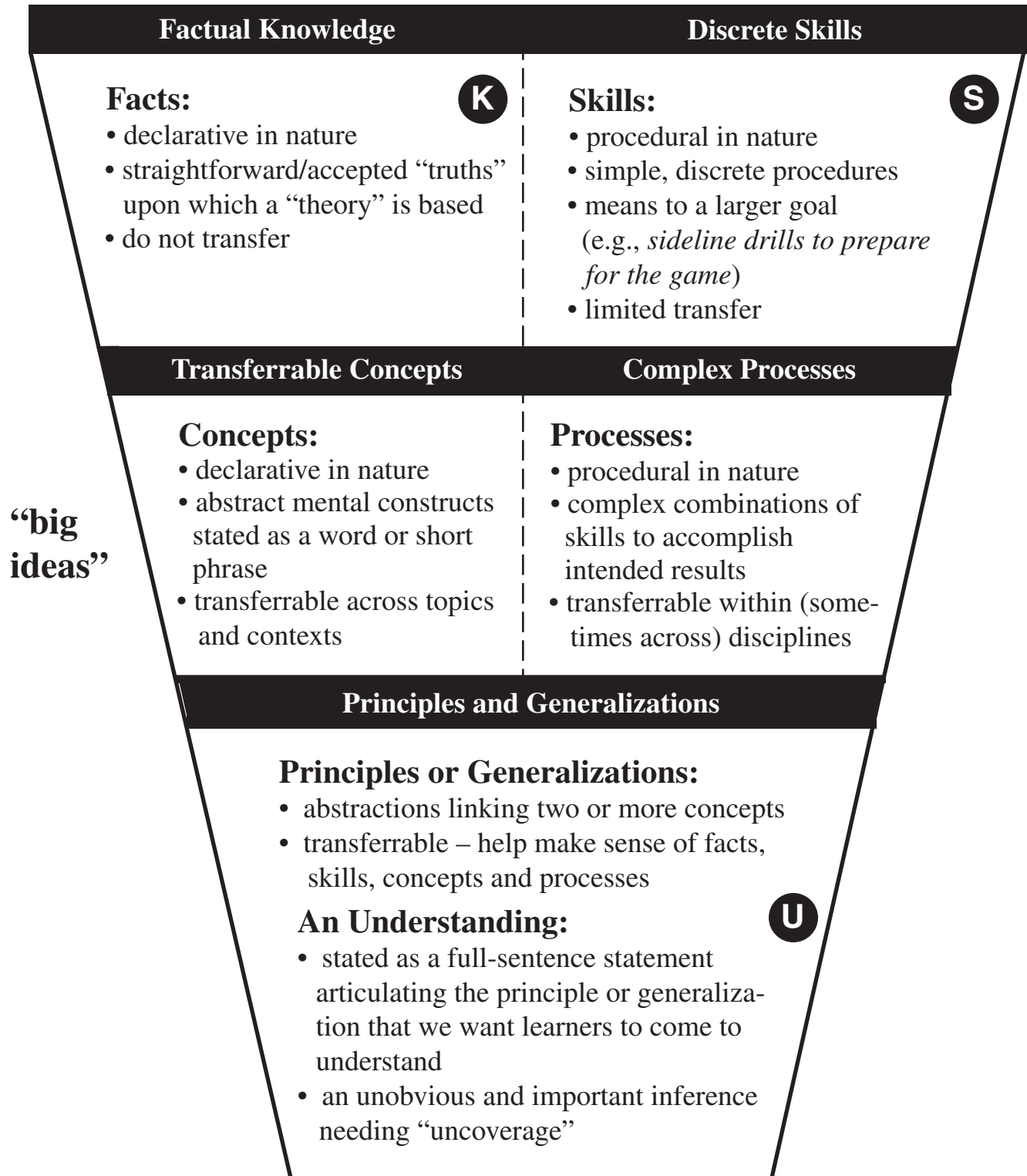
- key terms - protein, fat, calorie, carbohydrate, cholesterol, etc.
- types of foods in each food group & their nutritional values.
- the USDA Pyramid guidelines.
- variables influencing nutritional needs.
- general health problems caused by poor nutrition.

Students will be able to:

S

- read and interpret nutrition information on food labels.
- analyze diets for nutritional value.
- plan balanced diets for themselves and others.

Structure of Knowledge – Definitions of the Elements

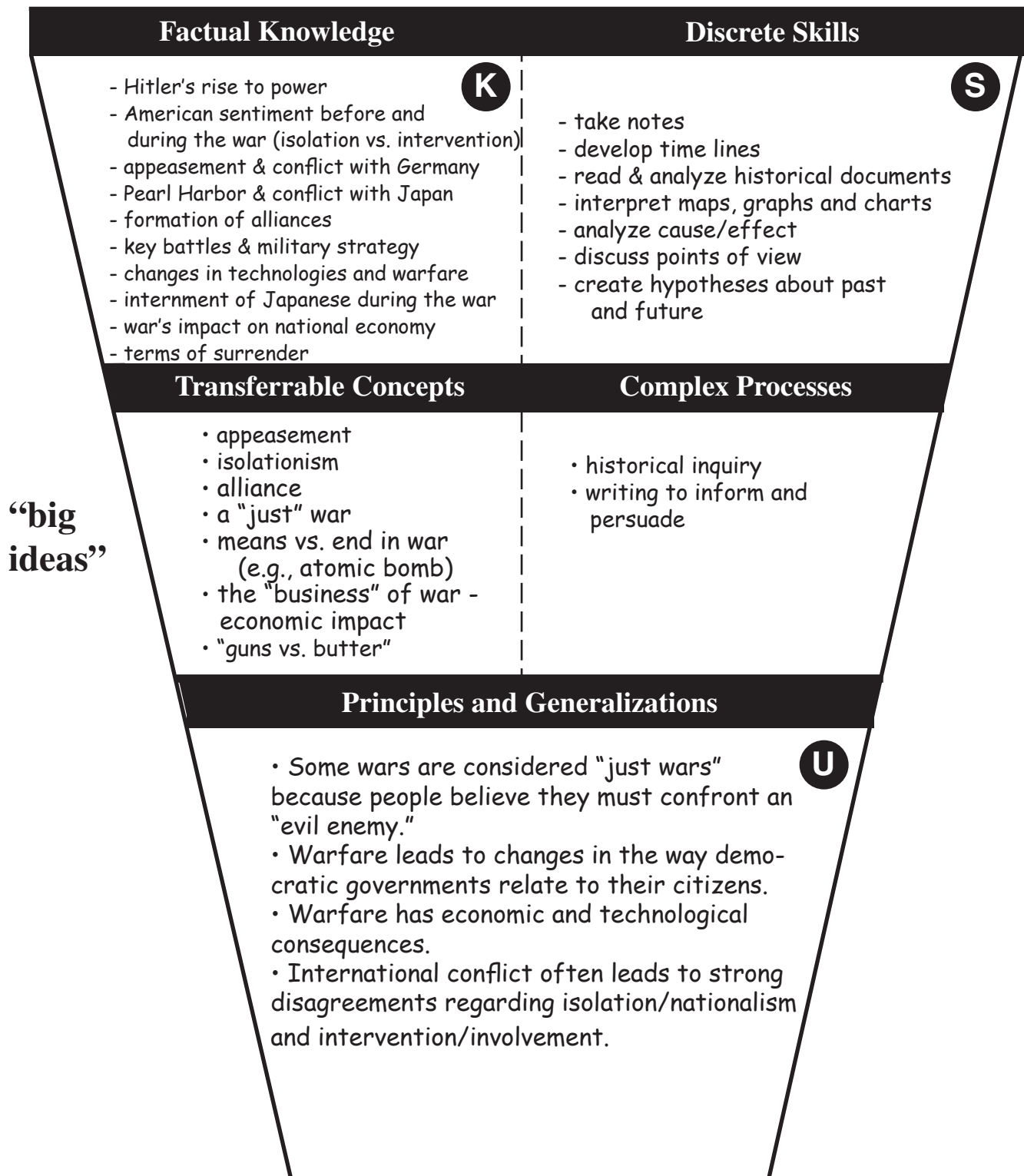


Structure of Knowledge

Established

Goal/Topic:

World War II

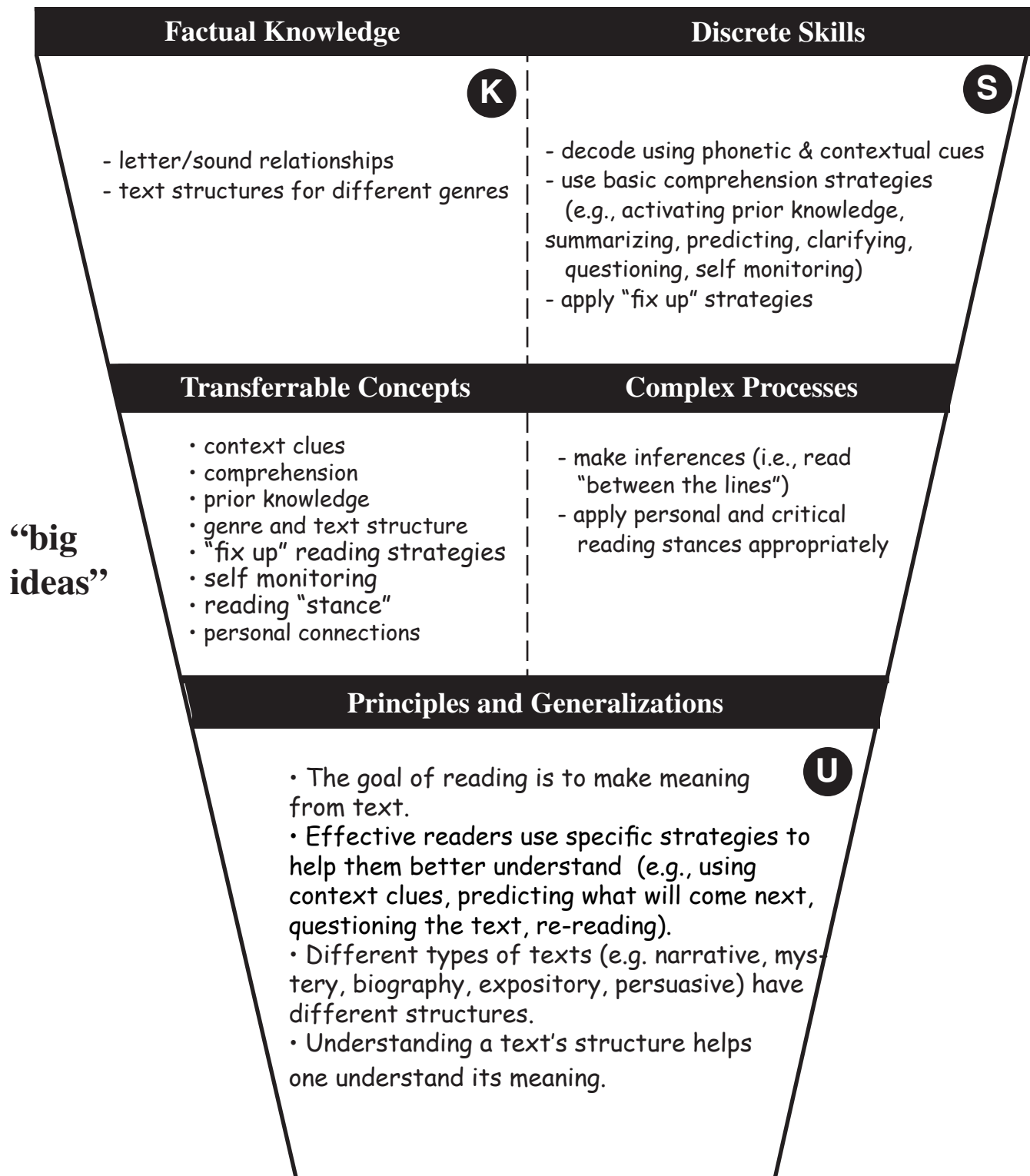


Structure of Knowledge

Established

Goal/Topic:

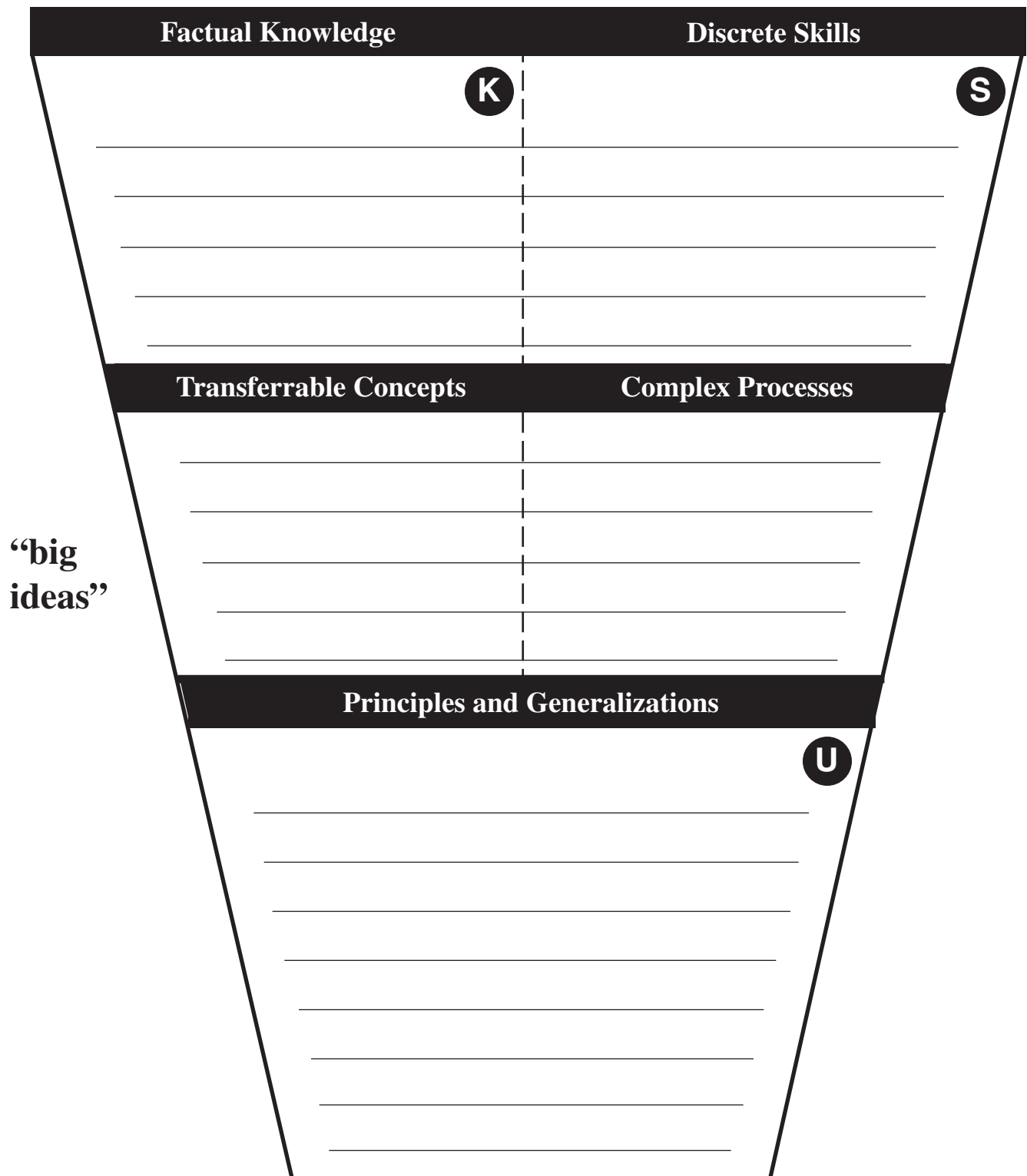
reading



Structure of Knowledge

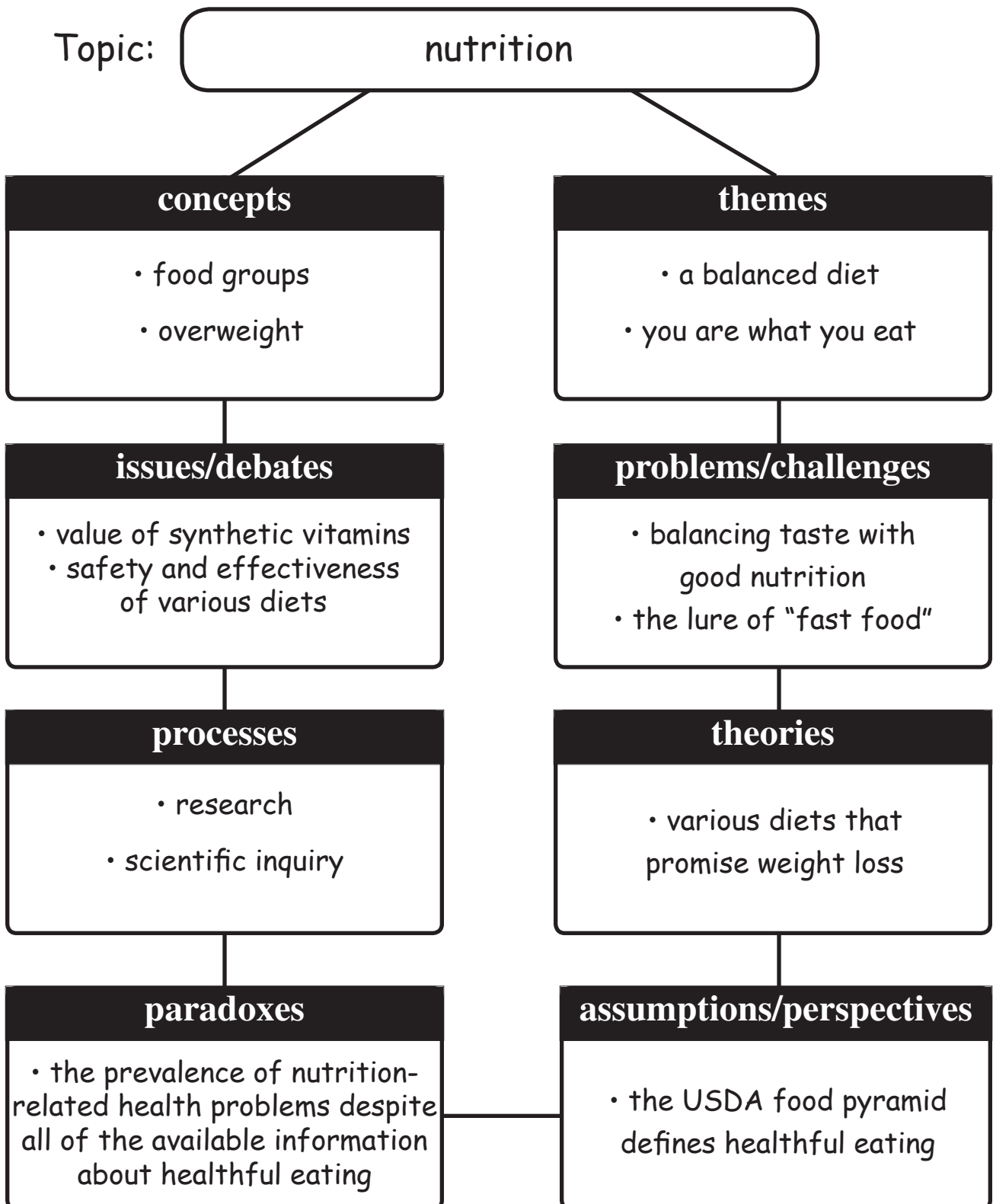
Established

Goal/Topic:



From Topics to Big Ideas

(example)



From Topics to Big Ideas

Given the topic of your unit, brainstorm possible “big ideas” using the following categories:

Topic:

concepts

issues/debates

processes

paradoxes

themes

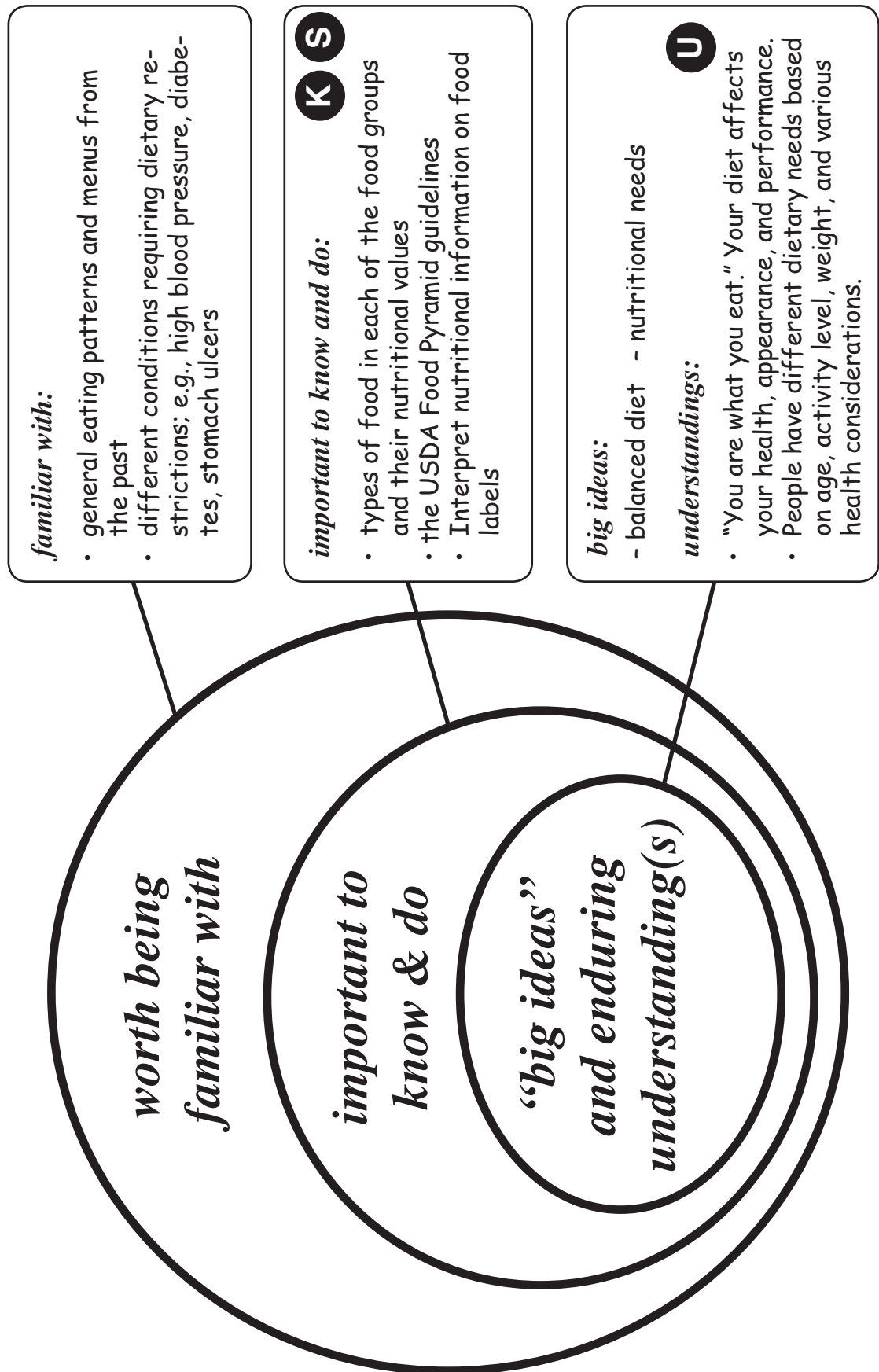
problems/challenges

theories

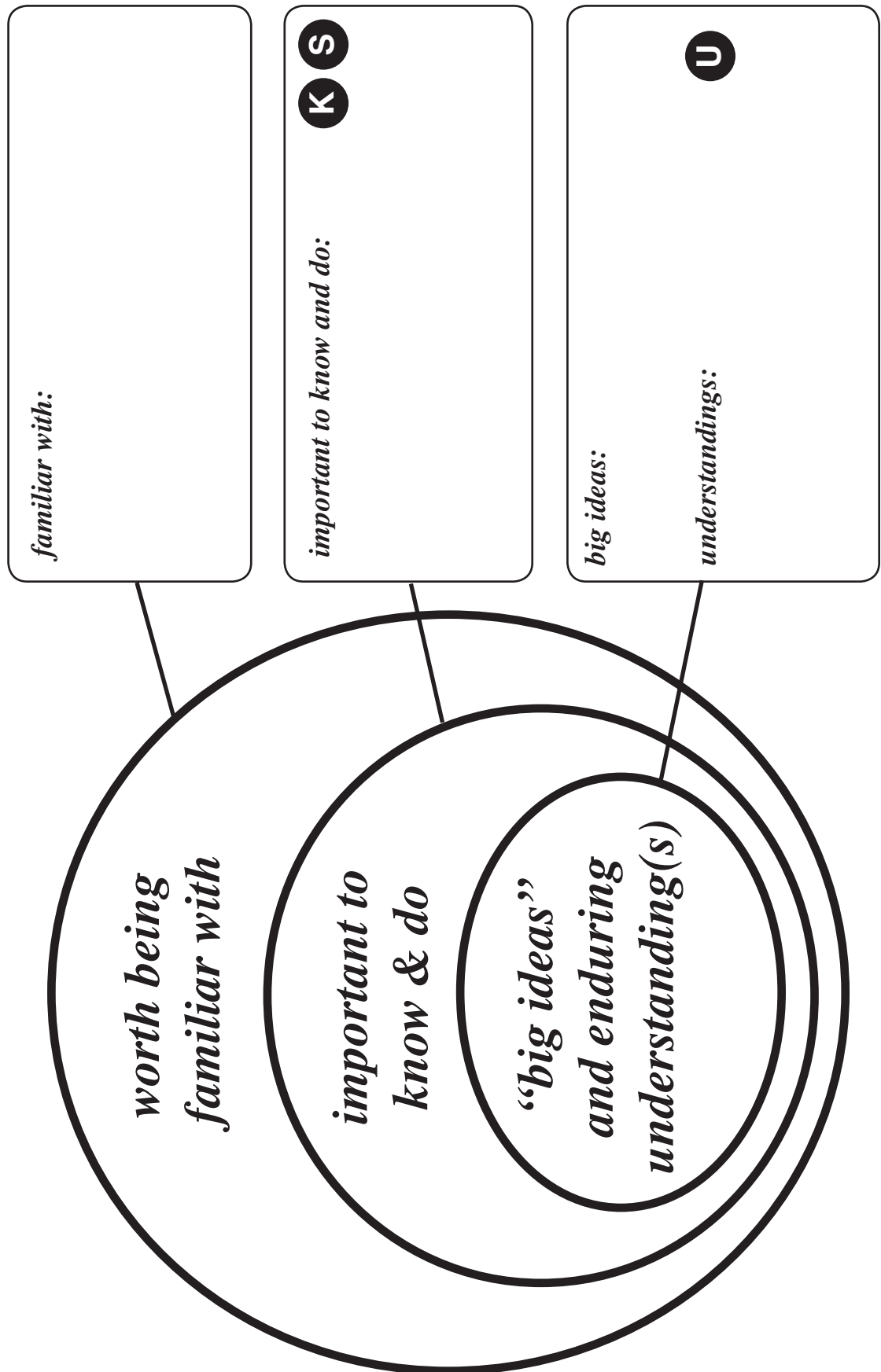
assumptions/perspectives

Clarifying Content Priorities

(example – nutrition – elementary/middle)



Clarifying Content Priorities



Identifying Essential Questions & Understandings

Use one or more of the following questions to “filter” topics or big ideas in order to identify possible essential questions and desired understandings.

topic(s)/big idea(s):

**What essential questions are raised by this idea/topic?
What, *specifically*, about the idea/topic do you
want students to come to understand?**

Why study _____? So what?

What makes the study of _____ “universal?”

If the unit on _____ is a story, what’s the “moral of the story?”

What’s the “big idea” implied in the skill /process of _____?

What larger concept, issue, or problem underlies _____?

What couldn’t we do if we didn’t understand _____?

How is _____ used/applied in the larger world?

What is a “real-world” insight about _____?

What is the value of studying _____?

essential question(s):

Q

understanding(s):

U

Enduring Understandings (examples)

Arithmetic (numeration)

- Numbers are concepts that enable people to represent quantities, sequences, and rates.
- Different number systems can represent the same quantities (e.g., bases).

Art

- The greatest artists often break with established traditions and techniques to better express what they see and feel.
- Available tools, techniques and resources influence artistic expression.
- Great art addresses universal themes of human existence.

Business/Marketing

- No business can successfully satisfy all consumers with the same product, so it must identify its target market.
- Patterns of consumption inform production and marketing decisions.

Dance

- Dance is a language of shape, space, timing and energy.
- Movement can communicate ideas and feelings.

Economics

- In a free-market economy, price is a function of supply and demand.
- Relative scarcity may lead to trade and economic interdependence or to conflict.

Foreign Language

- Studying other languages and cultures offers insights into our own.
- Meaning is conveyed through phrasing, intonation, and syntax. (Just because you can translate all the words doesn't mean you understand the speaker.)

Geography

- The topography, climate, and natural resources of a region influence the culture, economy, and life-style of its inhabitants.
- All maps distort the earth's representation of area, shape, distance, and/or direction.

Government

- Democratic governments must balance the rights of individuals with the common good.
- A written constitution sets forth the terms and limits of a government's power.
- Different political systems vary in their tolerance and encouragement of innovation.

Enduring Understandings

(examples - continued)



Health

- Dietary requirements vary for individuals based on age, activity level, weight, metabolism, and health.
- Participation in lifelong sports promotes physical and mental wellness.

History

- History involves interpretation; historians can and do disagree.
- Historical interpretation is influenced by one's perspective (e.g., freedom fighters vs. terrorists).

Media/Technology

- Technological progress presents new possibilities and problems.
- Just because it is on the Internet or in a book, doesn't make it true

Literature

- Novelists often provide insights about human experience through fictional means.
- An effective story engages the reader by setting up questions - tensions, mystery, dilemmas, or uncertainty - about what will happen next.
- Everybody is entitled to an opinion about what a text means, but some interpretations are more supportable by the text than others.

Mathematics

- Sometimes the "correct" mathematical answer is not the best solution to "real-world" problems.
- Heuristics are strategies that can aid problem solving (e.g., breaking a complex problem into chunks, creating a visual representation, working backward from the desired result, guess and check)
- Statistical analysis and data display often reveal patterns that may not be obvious.

Music

- The silence is as important as the notes.
- Popular music has shifted from emphasizing melody and lyrics to emphasizing multi-layered rhythms.

Philosophy and Religion

- Ethicists disagree whether the results of an action or a person's intentions matter most in judging the morality of actions.
- One gains insight into a culture by studying its religious traditions.

“Unpacking” Goals – Method # 1

Established Goals:

G

New Jersey LANGUAGE ARTS Standard 3.3 –

All students will write in clear, concise, organized language that varies in content and form for different audiences and purposes.

Stated or implied “big ideas” in the NOUNS and ADJECTIVES:

- content and form +
- audience and purpose +
- organized =
“form follows function”

Stated or implied “real-world performances” in the VERBS:

writing...

- different content and form
- for different audiences and purposes

Understanding(s):

U

Students will understand that...

- Audience and purpose (e.g., inform, entertain, persuade, provoke) influence literary techniques (e.g., organization, style, and word choice).
- Different genres have unique organizational patterns.

Essential Question(s)

Q

- What am I trying to achieve through my writing?
- For whom am I writing?
- How do great writers hook and hold their readers in different genres (e.g., mystery, essay, poem, historical fiction, etc.)?

Performance Task Ideas:

T

- Have students write for the same purpose (e.g., to inform or persuade) to different audiences, and explain the influence of audience on their style, word choice, etc.
- Have students write on the same content for two different genre (e.g., essay, poem, letter to the editor, etc.), and explain each genre's influence on organization, style, word choice, etc.

“Unpacking” Goals – Method # 1

Established Goals:

G

New Jersey MATHEMATICS Standard 4.3

All students will connect mathematics to other learning by understanding the interrelationships of mathematical ideas and the roles that mathematics and mathematical modeling play in other disciplines and in life.

Stated or implied “big ideas” in the NOUNS and ADJECTIVES:

- mathematical modeling in various disciplines and life

Stated or implied “real-world performances” in the VERBS:

- examples of effective mathematical modeling of “real-life” data or phenomena
- critically review a mathematical model for its appropriateness to a given “real-life” situation

Understanding(s):

U

Students will understand that...

- Mathematical models simplify and connect phenomena so that we might better understand them.
- Mathematical models must be viewed critically so that they do not distort or mislead.

Essential Question(s)

Q

- In what ways is mathematical modeling useful?
- How do you know if your model is a good one (for a particular situation)?
- What are the limits of mathematical modeling?

Performance Task Ideas:

T

- Have students create a mathematical model for a selected “real-world” situation (e.g., seasonal temperatures).
- Have students critically review a mathematical model for its appropriateness to a given situation (e.g., the Mercator Projection for representing the globe in 2-dimensions).

“Unpacking” Goals – Method # 1

Established Goals:

G

**Stated or implied “big ideas” in
the NOUNS and ADJECTIVES:**

**Stated or implied “real-world
performances” in the VERBS:**

Understanding(s):

Students will understand that...

U

Essential Question(s)

Q

Performance Task(s):

T